ISSN: 2456-8678

[Vol-6, Issue-1, Jan-Feb, 2022]

Issue DOI: <a href="https://dx.doi.org/10.22161/ijebm.6.1">https://dx.doi.org/10.22161/ijebm.6.1</a>
Article DOI: <a href="https://dx.doi.org/10.22161/ijebm.6.1.6">https://dx.doi.org/10.22161/ijebm.6.1</a>

# Effect of service quality on customer satisfaction in Tanzanian energy industry: A case of TANESCO residential customers in Nyamagana District

Joseph Joel Peter, Gerry Batonda

Faculty of Business and Economics, St. Augustine University of Tanzania, Tanzania

Received: 19 Dec 2021; Received in revised form: 07 Feb 2022; Accepted: 15 Feb 2022; Available online: 25 Feb 2022 ©2022 The Author(s). Published by AI Publications. This is an open access article under the CC BY license (https://creativecommons.org/licenses/by/4.0/)

Abstract— This study considers that service quality dimensions including reliability, assurance, tangibility, empathy and responsiveness have enormous contribution to customer satisfaction. This study aimed at assessing the effect of service quality dimensions on customer satisfaction in Tanzania Energy Industry. Data was collected from 186 residential customers of TANESCO in Nyamagana district who were selected using stratified sampling technique. This study used questionnaire and documentary review to gather information concerning the topic under study. Quantitative data were analyzed using descriptive statistics and inferential statistics including Pearson correlation and regression analysis in order to determine the effect of each service quality dimension on customer satisfaction. Regression analysis results indicated that service quality dimensions including reliability, assurance, tangibility, empathy and responsiveness have positive significant influence on customer satisfaction. The findings also indicated that customer expectations of TANESCO services in accordance to service quality dimensions are bigger than their perceptions of services they receive from the company. This study strongly recommend improvement of TANESCO service delivery in terms of service reliability, assurance, tangibility, empathy and responsiveness as a way to achieve customer satisfaction.

Keywords— service quality, reliability, assurance, tangibility, empathy, responsiveness and customer satisfaction.

## I. INTRODUCTION AND BACKGROUND

In today's world, competition between organizations especially those providing the same products/services is stiff as a result the issue of service quality has been a prime concern as all entities focus to differentiate themselves (Saravanan and Rao, 2007; Zeithaml et al 2018). This has not been a concern to private oriented entities only, the public entities are these days expected to offer quality help and satisfy their customers who are basically the inhabitants (Zamil & Shammot, 2011; Hadiyati 2014). Different models concerning organization quality have been developed worldwide, yet with the ultimate objective of this audit, SERVQUAL model made by Parasuraman et al. (1988) facilitate the review. This model indicated that customers evaluate nature of organization by taking a gander at their suspicions for the

offered support with their perspective on the genuine exhibition of offering administrations. In Africa, several researchers such as Namupala (2019) and (Gabena 2019) have audited the issue of service quality and its link to customer satisfaction in public sector and found that these concepts have a linear relationship.

Consumer satisfaction tends to be a subject of extraordinary interest to associations including those in public sector such as TANESCO. Despite TANESCO's efforts to build a new image in its service delivery, there have been so many complaints from customers about poor customer service or delay in the delivery of the requested service such as power connection to residential house (DW 14; March 2021) and various protests from organizations and families across Tanzania on unpredicted blackouts/delay in power supply re-association (The

Citizen, March 01 2021). There are likewise steady clients' grumblings on helpless assistance conveyance in Nyamagana area, Mwanza city on its nature of administration conveyance (Zeithaml et al, 2018). What components/properties of every quality aspects that clients/shoppers are troubled have not been set up and hence the need for investigate service quality measurements as it identifies with customers satisfaction in TANESCO.

Connection between client expectations and perception is the way to measure users 'fulfillment (Pitt et al 1995; Zeithaml et al, 2018). Most investigations on consumer loyalty and administration quality have been conducted in private sector service organizations (Sing 2002; Slu and Mou, 2003; Riitho 2018; Khattab, 2019). Furthermore, studies in public sector have focused on other industries such as cigarette factory in Indonesia (Hadiyati 2014) and social security sector in Zimbabwe (Chikwawawa 2019). Very few studies have investigated administration quality ascribes and their effect on consumer satisfaction in energy industry except an Iranian study by Dehghan (2006) and Namibia (Namapala 2019).

Many studies investigations have been directed in Tanzania to recognize service quality aspects that clients esteem most in assistance arrangement and relationship with clients fulfillment. The main Tanzanian review which inspected the impact of organization quality on shopper dependability was in Bank region (Tarimo, 2015). Furthermore, TANESCO's service specifications is very attractive, however complaints of customers about its actual service delivery still exists. For instance, TANESCO stipulated that it provides association and supply of power to its clients inside a predefined time, service is affordable and there is on time maintenance in case of emergency (TANESCO, 2013). If all of these service specifications could have been delivered in actual performance complains should have not been existing. For this existing gap, the study was looking forward to determine association between TANESCO services specification with actual services delivery to customers. Thus, the proposed study aimed to fill these knowledge gaps and investigated the impact of administration quality on consumer satisfaction in Tanzanian Energy industry: an instance of TANESCO residential customers in Nyamagana area. Prime focus has been given specifically to five service quality dimensions including reliability, assurance, tangibility, empathy and responsiveness.

#### II. LITERATURE REVIEW

#### 2.1 Service quality concept

Service quality has emerged as the fundamental weapon for a corporation to win marketing in competition against other competitors in the fresh years of the twenty-first century of selling competition. A few firms or associations utilize the nature of their administration as an upper hand to beat their rivals on the lookout, consequently in this situation, the one with the prevalent help quality will win the market. On this establishment, different analysts have cemented the idea of administration quality by executing their idea of administration quality definition as follows, as per Cronin& Taylor: (1992). Today, with expanded vicious business environment, organization quality is essential for the accomplishment of any affiliation. Organization quality is huge point of view that impacts the earnestness of business.

As shown by Saghier, and Nathan (2013), association quality is a gigantic idea in the assistance business and is huger for cash related master affiliations who experience issues in showing their clients thing segment. It in like manner also critical in open region relationship regardless, when there is no contention as the supplanting point is a motivation for usage of public money. So collecting picture a positive picture in the characters of general society is the core of their administration arrangement.In cutthroat climate where there are numerous players, association quality is viewed as an enormous mechanical get together for an association's battle to segregate itself from its enemies (Ladhari, 2009). The importance of administration quality to affiliations is featured particularly the way that affiliation quality is considered to be a gigantic mechanical social gathering for an affiliation's fight to isolate itself from its enemies (Ladhari, 2009).

#### 2.2 Customer satisfaction concept

Satisfaction is an overall customer mentality towards an expert association (Levesque &McDougall, 1996) or the customers' energetic response to the differentiation between what they expect and what they get (Zineldin, 2000). According to Kotler (2000), "satisfaction is a man's impression of bliss or dissatisfaction occurring because of looking at a thing's unmistakable show (or result) identical to their doubts". Shin and Elliot (2001) confirm that no business can exist without customers. Henceforth, accepting an association should be compelling and helpful; it ought to satisfy its customers. Angelova and Zekiri (2011) ensure that "fulfilled clients structure the establishment of any convincing business since customer reliability prompts go over buys, brand commitment, and positive relaxed". In a monopolistic climate where there is one player like TANESCO, consumer loyalty in likewise

significant in building great public picture especially in administrations presented by the public area associations even those in a monopolistic circumstance like TANESCO and limit clients' objections (Rhea and Shrock, 1987) and ought to endeavor essentially lives up to their clients' desires.

#### 2.3 Theoretical literature review

This part reviews the theory which explains the study problem which in the case, service quality model developed by Parasuraman and colleagues in (1988) was the right one for the study.

# 2.3.1 SERVQUAL MODEL

The SERVQUAL model, which was made by Parasuraman et al. (1988), is possibly the most overall utilized assist quality with displaying and stays as one of the most sketchy models current. In their model, Parasuraman, et al. (1988) proposed a more cautious standard for concentrating on association quality and empowered an evaluation scale for association quality SERVQUAL. In the improvement of SERVQUAL, they kept up with the initial model that is driven by quality being studied by customers. This assessment is done through seeing their doubts for the offered backing and standing apart them according to their viewpoint on the authentic demonstration of the passed on association.

# 2.3.2 The five defined gaps in the SERVQUAL model are:

2.3.2.1 Gap 1: Consumer expectation versus management perception: This opening is between what the clients expect of worth and the impression of the alliance's association. Affiliation's organization see for clients' assumptions sometimes not meet the credible doubts for clients (Asubonteng et al., 1996; Parasuraman, 1988; and Carrillat et al., 2007). Saying that, the explanation that the client's understanding and reality don't facilitate is the shortfall of exhibiting research done by the assistance association in perceiving the prerequisites of their customers, For any situation, satisfying customers' cravings is tricky and outlandish if the supplier doesn't see or fathom these presumptions (Gabbott and Hongg, 1998).

**2.3.2.2 Gap 2:Management perceptions versus the specific of service:** This initial arrangements the separation between the board information and the genuine organizing of organization points of interest. Regardless, when the organization sees the customers' prerequisites and suspicions, it might be difficult to change its objectives into organization quality judgments. This is essentially a result of the limited staff capacities in overseeing such conditions, or money related issues that could baffle satisfying customers' longings.

**2.3.2.3 Gap 3:Service specifications versus service delivery:** This opening reviews the separation between association nuances as a speculative depiction, and the execution and development of the genuine assistance. However the plan of association quality decisions could be exact, the most notable technique for developing a deliverable help might flop considering various reasons. This wires workers' low show, creation issues, monetary reasons, the pioneers and authoritative issues, and so forth As shown by Parasuraman et al., (1985), affiliations can attempt to decrease this opening through doing a predictable quality upgrade measure with works on expecting to truly investigate association rules against the genuine vehicle on a continuing on way.

**2.3.2.4 Gap 4: External communication to consumers versus service delivery:** This opening watches out for the miscommunication of organizations quality provided for the customers by an affiliation. For example, an affiliation reliably praising its organization quality would provoke high and absurd suppositions by its customer and may end up with a colossal opening among presumptions and certifiable help movement (Parasuraman et al., 1985).

2.3.2.5 Gap 5: Expected service versus perceived service: This opening deals with the differentiation between customers' suspicions and the perspective on the passed on organization. It is the delayed consequence of the presence of somewhere around one of the past four openings. Exactly when this opening arises, chiefs should focus in on tending to or forgoing the other four openings, so they can take out and do whatever it takes not to have Gap 5 (Ekinci, 2004). Likewise, it has been highlighted that the supposition's level expects a basic part in help appraisal (Lacobucci et al., 1994). As demonstrated by customers, this opening is the ideal assist transport with estimating since it is driven by their suspicions and veritable case perceptions. Similarly, Parasuraman et al., (1985) associated Hole 5 with association quality assessments as a proof of how clients utilize all assessments in their assessment.

#### 2.3.3 Relevance of SERQUAL Model to Present Study

In spite of its analysis, SERVQUAL is model to be utilized for this examination as administrations furnished by TANESCO fits well with SERVQUAL. As Shahin (2006) takes note of, the SERVQUAL approach is the most generally perceived and ordinary method for assessing organization quality in help arranged affiliations. The SERVQUAL model has been used by various researchers to measure organization quality in open affiliations (Ali and Yaseen, 2016; Namupala, 2019; Chikwawawa, 2019).

#### 2.4 Service Quality and Customer Satisfactions

Consumers think that it is harder to evaluate administration quality than they do item quality. Customer assumptions are contrasted with genuine help execution to decide administration quality insights. Quality assessments are not simply founded on the result of a help; they additionally incorporate a survey of the assistance conveyance process (Sesser et al. 1978). Administration quality has been characterized as a disposition coming about because of the correlation of assumptions with execution, which is connected yet not indistinguishable from fulfillment (Parasuraman, Zeithaml and Berry 1988). The relationship between service quality and customer satisfaction was explained in respect to the service quality dimensions including reliability, assurance, tangibility, empathy and responsiveness.

#### 2.4.1 Reliability and Customer Satisfaction

Reliability is depicted as the capacity to play out the reliable association constantly and unequivocally. Steadfast quality is about relentlessness and consistency throughout activity of association and watching out for clients' necessities. It relates for the current situation to TANESCO meeting its confirmations. Parasuraman et al. (1988) saw unwavering quality to be the essential determinant of viewpoint on nature of association. The association between assessments of association quality and purchaser commitment was examined by Ibáñez et al. (2006). They observed a monster relationship between consistency of associations and the fulfillment level of clients. The creating uncovers a lengthy level of positive relationship between association quality, client devotion and execution (both cash related and non-monetary) where inverse supervising among client and specialist is the essential concentration.

#### 2.4.2 Assurance and customer satisfactions

Other than actual resources, constancy, compassion and responsiveness; confirmation has been seen as a fundamental piece of association quality by Parasuraman et al. (1988). Demand infers the information and respectfulness of workers and their capacity to move trust and confidence in overseeing customers through their knowledge into cycles, great habits and their dependability (Zeithaml et al 2018). So when applied to help transport by TANESCO, confirmation shows whether the customers sense that the laborers are capable in what they are doing. A positive customer acumen in such way will encourage sureness and trust in TANESCO and decipher in a particular level of purchaser relentlessness. Accordingly, it is recognized that if the representatives of TANESCO show solid immediate, the fulfillment level of clients can be upgraded from an overall perspective in this manner would be its public picture. It might in like way unequivocally influence repurchase intension of clients of other TANESCO related things and organizations (Ndubisi, 2006; and Ndubisi&Wah, 2005).

#### 2.4.3 Tangibility and Customer Satisfactions

Tangibles are the presence of genuine workplaces, gear similarly as workforce and correspondence materials that spur trust in the affiliation's ability to offer the help. Impacts in TANESCO fuse all genuine properties of the assistance transport environment, including experts' appearance, electrical gadget equipment used, and the presence of force stations. Actual resources routinely expect amazing importance since organizations are not unquestionable, yet rather irrelevant. So customers will overall quest for indications of the idea of organizations to be introduced from generous things around the assistance, similar to designs, stuff and staff (Wahab&Suhaimi, 2012). The inclination TANESCO's belongings by and large influences customers and impacts how they see the help.

#### 2.4.4 Empathy and Customer Satisfaction

Empathy is with respect to the careful and individualized thought that an affiliation can provide for its customers (Sharma, 2010). Because of TANESCO, customers will look at how much TANESCO's agents focus on their necessities and show an interest in aiding them. A positive and colossal relationship is found among compassion and buyer faithfulness by Iglesias and Guillén (2004). It was proposed in another evaluation study, that clients might stay unsatisfied with association quality if an opening is left in sympathy (Namupala 2019). It was besides settled by Al-Marri et al. (2007) that customer resolve is basically affected by compassion. It makes clients content and over the long haul fills in as a basic pointer in managing the cash related demonstration of the alliance like TANESCO as more would a more significant proportion of their things and associations.

# 2.4.5 Responsiveness and customer satisfaction

Responsiveness alludes to the instantaneousness with which organizations and help are given to customers; so the speed of reaction to conditions accepts a crucial part. For organization movement by TANESCO, responsiveness incorporates the helpful plan of force organization, for instance, restoring power or making affiliation right away by TANESCO subject matter experts and their energy to go an extra mile. This estimation considers the openness likewise, speed with which TANESCO work power address the client concerns, necessities, questions or objections (Ladhari, 2009). Concerning responsiveness, customers are amazingly tricky to the qualification between cases wherein TANESCO isn't in a circumstance to deal with their inclinations and situations where

TANESCO can achieve something, but fails to address it and doesn't uncover its difficulty to the customer (Electricity Control Board [ECB], 2017).

# 2.5 Empirical Literature Review

Khan and Fasih (2014) conducted a study to discover which administration quality measurements might improve consumer loyalty and client reliability in a superior manner. The exploration embraced SERVQUAL model in their examination. The explored overviewed respondents who were browsed an extent of moving fragment features using isolated unpredictable testing. Banks from both public and private region are picked for analyzing. Audit studies were coursed among 225 customers of different banks. The information was examine dosing graphic measurements, one example t-test, connection and relapse The discoveries demonstrated that assistance quality and every one of its measurements had huge and positive relationship with consumer loyalty and steadfastness. This study was in banking industry while the proposed is in public organization in monopolistic market and the way employee provide the study may be different.

Ali and Yaseen (2016) led study included both an abstract and quantitative assessment for the help idea of public organizations in metropolitan Egypt. The emphasis on depicted endeavors applied by the Egyptian government to empower public associations in a specific district which is New Cairo. This is done through unstructured gettogethers with specialists in this field. Two specialists were met and an appraisal was done between their answers concerning the composition. Methods used by to cultivate help quality transparently benefits were perceived.

Chikwawawa (2019) carried out a study to evaluate the fulfillment of retired people with the National Social Security Authority's (NSSA) administration in Harare, Zimbabwe. The review took on the quantitative investigation plan and data were accumulated through a survey from an illustration of 162 discretionarily picked individuals. Five creates of the SERVQUAL model, specifically; impacts, reliability, responsiveness, affirmation and compassion, given the hypothetical framework to the survey. The data was gotten and examined utilizing the Statistical Package for Social Sciences (SPSS) Version 22. Entrancing quantifiable examination for fragment factors and various direct backslide assessments were directed to choose the association between the various components organization quality and buyer faithfulness. The review surmised that customers are content with organization estimations of impacts, attestation and compassion, but was not dominating on steadfastness and responsiveness.

Gobena (2019) conducted a study on consumer loyalty and administration quality openly lodging area association in Ethiopia. The general objective of this review was to assess the overall level of organization quality and shopper devotion in Nekemte Municipality and to evaluate the impacts of service quality estimations on customer dependability under the audit area. The review took on SERVQUAL as its determined model of organization quality estimations. Information for this study was aggregated in Nekemte Municipality, which is planned in Oromia region, Ethiopia. The discoveries of the study showed that consumer satisfaction of service quality was below average, also, clients are not happy with the help. In latent shell, considering the finding all assistance quality estimations by and large influence organization quality and purchaser unwaveringness. The review surmised that over all assistance nature of Municipality isn't adequate and customers are not happy with the associations of Nekemte Municipality office delegates. The analyst suggested that Nekemte Municipality land affiliation bodies should secure on these help quality assessments with working with encourage its association quality and client constancy of Nekemte Municipality. This review oversaw public private administrations, while the proposed is focusing in on power supply to private housing.

Namupala (2019) conducted a study to assemble more information regarding the impact of organization quality on purchaser steadfastness of NamPower private customers in Namibia, utilizing the five pieces of the SERVQUAL model. Specifically, the review investigated whether client impression of Nam Power associations coordinates with their suppositions; if observations outperformed presumptions, buyer devotion has been cultivated just as the reverse way around. The assessment was realistic and quantitative in nature. It used a web based audit using coordinated overview included 22 things of a changed SERVQUAL model evaluated on a 5-point Likert-scale from 'unequivocally consent to 'positively struggle'. The results additionally revealed that purchaser reliability towards Manpower benefits in Otiozondiupa. Khomas, Omaheke, Hardap and Karas area was fundamentally affected by all of the five parts of administration quality. Considering everything, responsiveness and sympathy assessment of administration quality were found to on a very basic level influence customer faithfulness independently. The disclosures of this review have the ability of affecting researchers and publicists to take on the SERVQUAL procedure among different power utilities. The review proposes some publicizing strategies for NamPower the board to raise the level of purchaser dedication. The review proposed that NamPower conducts standard customer outlines to all the

more profoundly concentrate on customers' suspicions and bits of knowledge and designer representatives' preparation to those clients' overviews. The proposed concentrate on checks out the five assistance quality aspects in Tanzanian setting.

Masika, (2014) Researched on the effect of service quality and customer satisfaction on customer loyalty: A Case of NSSF in Tanga City. General outcomes from this review showed a positive critical relationship in among Service Quality, Customer Satisfaction and Customer Loyalty. There were prominent connection among fulfillment and administration quality specifically. The test from relapse likewise uncovered that a positive bearing, and moderate relationship and furthermore huge relationship among consumer loyalty on client devotion. Likewise, utilizing multivariate relapse has showed that, consumer loyalty has go about as an arbiter between of administration quality to client dedication. The examination reasoned that, for coherence presence of an organization in the market itshould convey great quality support of its customers as the clients will generally be faithful to the association by the by they are not fulfilled.

Ulaya, (2017) researched on the impacts of service quality on customer satisfaction in Tanzania Banking Industry: The Case investigation of Akiba Commercial Bank. The aftereffect of the discoveries the showed that AKIBA business bank clients are very much satisfied with the administration quality components of dependability, affirmation, substance, compassion and furthermore responsiveness. Consequently the review finished that the clients of the Akiba Commercial Bank were happy with the administrations conveyed by the whole bank. Though the respondents propose that Akiba Commercial Bank ought to extend their administrations in to other provincial regions and not to be town centered as it were.

Mbise (2015) conducted a study at Tanzanian business schools on service quality metrics. Another Process Outcome aspect in the drawn out SERVQUAL was demonstrated to be a higher priority than different aspects in this study. Managers at business colleges ought to use the lengthy SERVQUAL instrument to uncover models that understudies use to assess the nature of instruction administrations they get. Knowing with regards to these perspectives would assist business with tutoring chairmen characterize needs while assigning restricted assets to further develop school quality and advanced education quality overall. Administrative offices ought to take on this model as an enhancement to standard execution markers, as per the report.

#### 2.5.1 Research Gap

Although the reviewed studies shown that assistance quality impacts consumer satisfaction, the significance put by clients on help quality measurements varies starting with one public area association then onto the next. This achieved some assist quality estimations with influencing purchaser devotion while other have less or no impact in any way shape or form. For example, Namupala (2019) every one of the five parts of organization quality impacted customer dedication in NamPower private customers in Namibia anyway responsiveness and compassion estimation of organization quality were found to generally influence shopper reliability independently. On other hand, buyer fulfillment of administration quality estimations was seen as less than ideal in government private housing organization of Nekemte Municipality, Ethiopia and customers are not content with the help (Gabena 2019) deriving that there may be nation contrast in customers' suppositions and bits of knowledge. Scarcely any audit has been coordinated on the association between organization quality estimations and purchaser dependability in Tanzania public region affiliations especially in open utility region. The vitally Tanzanian survey which examined the impact of organization quality on purchaser unwaveringness was in banking region (Tarimo 2015). Moreover, none of inspected studies has surveyed the association between affiliation organization subtleties and the real assistance conveyance in open area associations, as needs be making data opening recorded as a hard copy that proposed research hopes to explore, which will be new data. Therefore, this audit will investigate the impact of association quality on customer dependability in Tanzanian public region relationship with explicit reference to TANESCO private customers in Nyamagana locale of Mwanza city.

#### 2.6 Conceptual Framework

Figure 1; shows the theoretical system for this examination which shows the connection among independents and dependents variable. In particular, the assistance quality measurements are the independents factors and these include tangibility, responsiveness, assurance, reliability and empathy which will be conceptualized in terms of their expectations and perceptions customers' SERVQUAL model. Interestingly, the dependent variable is customer faithfulness. In a couple of examinations, it has been shown that there basic association between independent elements of organization quality estimations and customer faithfulness (Zeleke 2012; Khan and Fasih 2014; Ali and Yaseen 2016; Chikwawawa 2019); Gobena 2019; Namupala 2019). One of the significant holes called attention to in SERVQUAL model is administration

determinations versus administration conveyance. An association might design well the manner in which administration ought to be conveyed to clients, notwithstanding how the real assistance conveyance may be in productive due to coherent variables like money related necessities, lack of staffs or inadequacy of staffs. For example TANESCO very much specified that there ought to be association and supply of power inside a predetermined time, reasonable administrations, on time

upkeep in the event of crisis, illuminate clients about help gave and crises, genuineness and straightforwardness in managing clients, reimburse customers where electrical issues has caused setback or damage and conduction of customer guidance and social occasions. This survey is expecting choose the association between these help points of interest and the real assistance movement of TANESCO in Nyamagana district.

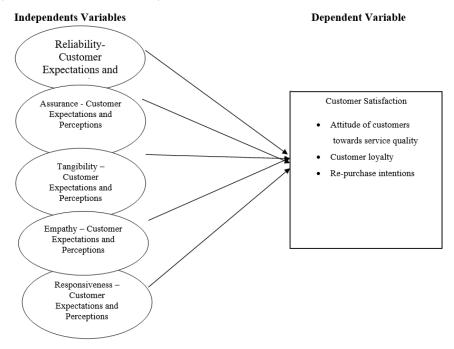


Fig.1: Conceptual Framework Source: Researcher (2021)

# III. METHODOLOGY

In order to achieve the purpose of this article, quantitative approach was adopted which enabled the use of scientific methods including inferential statistics. This approach was appropriate because baseline data concerning the effect of service quality dimensions on customer satisfaction is available as researchers such as Namupala (2019) and (Gabena 2019) have conducted the same study in other geographical areas. In this case, this paper deployed inferential statistics in order to draw an inference concerning the problem under study. The study area was TANESCO administrative area of Nyamagana in Mwanza city and the study population was residential customers of the company. The selected study area and population was useful for the study as the study required data concerning service quality and its effect on customer satisfaction in public entities and the company provides very crucial services needed by community, which in this case residential customers was the right study population to describe the problem. Stratified random sampling method

was used for sample selection, whileKrejcie and Morgan (1970's) table was used to determine the optimum sample size, in which the sample size of 186 respondents was drawn from the population of 362 residential houses. Data was collected using questionnaire and analyzed using multiple regression analysis with the aid of Statistical Package for Social Science (SPSS version 23.1).

#### 3.1 Demographic profile

Data was collected from 186 residential customers of TANESCO in Nyamagana district, in which majority (33.9%) were aged between 41 and 45 years old, followed closely by those aged between 31 and 40 years old and those with over 45 years old (See Table 1). In addition table 1 shows that more than half of respondents (68.8%) were male while the rest were female. The findings furthermore indicated that majority of respondents (20.4%) were drawn from Mkolani ward, followed by Buhongwa, Lwanhma, Butimba, Luchelele, Isamilo, Nyegezi and Mkuyuni.

*Table 1: Characteristics of respondents* (n=186)

Variable	Sub variable	Frequency	Percentage (%)
Age	Less than 21	14	7.5
	21-30	26	14.0
	31-40	44	23.7
	41-45	63	33.9
	Over 45	39	21.0
Gender	Male	128	68.8
	Female	58	31.2
Location of residential housing	Mkolani	38	20.4
	Buhongwa	27	14.5
	Nyegezi	17	9.1
	Lwanhma	25	13.4
	Luchelele	20	10.8
	Mkuyumi	17	9.1
	Butimba	22	11.8
	Isamilo	20	10.8

Field Data, (2021)

#### IV. RESULTS

As specified earlier, data was pooled from the field using questionnaires subsequently analyzed using multiple regression analysis. Five service quality dimensions including reliability, assurance, tangibility, empathy and responsiveness constructed the study objectives. In this context, presentation of the findings is organized based on the specific objectives of the paper.

# 4.1 The Effect of Reliability on Customer Satisfaction

The first objective of this paper was to assess the effect of reliability on customer satisfaction. Regression analysis results as shown in table 2 indicated that reliability has

significant positive influence on customer satisfaction ( $\beta$ = 0.176, t= 3.123, p < 0.05) (See Table 2). This implies that if TANESCO ensures on time service delivery, provide correct time of service installation, minimize errors and be sincere in solving customers' problem then customer satisfaction can be attained by the company. These findings are in line with the discoveries from different investigations, for example Namupala (2019) uncovered that unwavering quality emphatically affects consumer loyalty among Nam Power private clients in Namibia.

Table 2: Multiple regression results

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		В	Std. Error	Beta			Toleran ce	VIF
1	(Constant)	.551	.116		4.744	.000		
	Reliability	.211	.068	.176	3.123	.002	.277	3.616
	Assurance	.319	.069	.271	4.594	.000	.253	3.954
	Tangibility	.377	.068	.310	5.506	.000	.277	3.612
	Empathy	.493	.100	.398	4.933	.000	.135	4.400
	Responsiveness	.193	.105	.156	1.836	.048	.122	4.506

a. Dependent Variable: Customer Satisfaction

#### 4.2 The effect of assurance on customer satisfaction

Assurance is an important element of service quality, the reason why this article considered to assess the effect of assurance on customer satisfaction. Regression analysis results in table 2 indicated that assurance has significant positive influence on customer satisfaction (β= 0.271, t= 4.594, p < 0.05) (See Table 2). These discoveries are in accordance with the discoveries of Chikwawawa, (2019) who uncovered that clients are happier with administration quality element of assurance. Zeithaml et al, (2018) additionally uncovered that clients are happier with assurance as through it clients will actually want to detect that the workers are capable with what they are doing. In this context, TANESCO can ensure customer satisfaction if the indicators of assurance such as ability of employees to instill confidence in customers, ability in making customers feel safe using electricity, knowledge of employees to answer the questions of customers, provision of individual attention to employees and courtesy of employees have been realized.

#### 4.3 Effect of tangibility on customer satisfaction

It was also important to assess the effect of tangibility on customer satisfaction. Regression analysis results on the tangibility dimension and customer satisfaction is presented in table 2. The results indicated that tangibility has significant positive influence on customer satisfaction ( $\beta$ = 0.310, t= 5.506, p < 0.05) (See Table 2). In this case, if TANESCO ensure modern looking equipment and ensure neat appearance of employees then the company can realize customer satisfaction. Consistent with the findings of Namupala, (2019) that tangibility has positive significant influence on customer satisfaction among residential customers of a Namibian electricity company by the name of Nampower.

# 4.4 Effect of Empathy on Customer Satisfaction

The effect of empathy on customer satisfaction was also assessed in this study and regression analysis results indicated that empathy has significant positive influence on customer satisfaction ( $\beta$ = 0.398, t= 4.933, p < 0.05) (See Table 2). This implies that it is crucial for TANESCO employees to give individual attention to customers, to understand the needs of customers, provide quick resolution of customer's problems and provide convenient operating hours to customers. These findings concur with the findings of Chikwawawa, (2019) that clients are essentially satisfied with service quality measurement of empathy. However, Namupala, (2019) in his study he found otherwise; his study indicated that service quality dimension of empathy has no significant impact on customer satisfaction, unlike reliability, assurance and tangibility which had significant impact on customer satisfaction.

# 4.5 Effect of Responsiveness on Customer Satisfaction

The current study also intended to assess the effect of responsiveness on customer satisfaction. Regression analysis was performed on the relationship between responsiveness and customer's satisfaction as detailed table 2. Regression analysis results indicated that responsiveness has significant positive influence on customer satisfaction  $(\beta = 0.156, t = 1.836, p < 0.05)$  (See Table 2). Consistent with the findings of Gobena, (2019) that service quality dimensions including responsiveness have significant impact on customer satisfaction. Not similar with the findings of Namupala, (2019) who found that responsiveness has the least significant influence on customer satisfaction. In this context, it is very important for TANESCO to ensure proper provision of service performance schedule, provision of prompt service to customers and it is critical for employees to be responsive and willing to help customers.

#### 4.6 Correlation Results

Pearson correlation results as shown in table 3 indicated that the study' independent variables including reliability, assurance, tangibility, empathy and responsiveness have significant association with the study' dependent variable which was customer satisfaction (p < 0.05 respectively).

Table 3: Correlation results

Variable	1	2	3	4	5	6
1. Customer satisfaction	1					
2. Reliability	0.00	1				
3. Assurance	0.00	0.00	1			
4. Tangibility	0.00	0.00	0.00	1		
5. Empathy	0.00	0.00	0.00	0.00	1	
6. Responsiveness	0.00	0.00	0.00	0.00	0.00	1
M	2.78	2.49	2.70	3.04	2.72	2.75

SD	1.24	1.06	0.94	0.95	0.93	1.03

N=186, Correlation is significant at the 0.05 level

#### V. CONCLUSION AND RECOMMENDATIONS

#### 5.1 Conclusion

The paper concludes that administration quality dimensions of dependability, affirmation, substance, sympathy and responsiveness have positive critical impact on impact on client fulfillments among TANESCO private clients in Nyamagana District. These outcomes agree with the investigations of Chikwawawa (2019) in Zimbabwe's National Social Security Authority's administration in Harare, and those by Namupala, (2019) in Nam Power private clients in Namibia who tracked down that five assistance quality measurements have critical impact consumer loyalty in public sector organizations TANESCO residential customers expects that TANESCO services delivery should be in line with the service quality dimensions; expecting that TANESCO service should be more reliable, customers should be assured of services, service provides should tangible facilities that reveal their identity and professionalism, empathic to customers as well as display responsiveness towards service delivery. However, this study concludes that there is a contrast between what clients hope to get and their genuine impression of TANESCO administrations as larger part of clients differ that real TANESCO administrations are in accordance with assumption for the assistance quality measurements. Since that the assistance quality measurements have positive effect on consumer satisfaction, it is the right time for TANESCO to take actions to ensure that customer perceptions are in line with their expectations of service after service delivery.

#### 5.2 Recommendations

In respect to the findings of obtained through questionnaire from residential customers of TANESCO service, this study has reached to the following recommendations:

First, reliability of TANESCO services should be improved as the discoveries of this review showed that unwavering quality has positive critical impact on consumer satisfaction. Taking consideration TANESCO residential customer' expectations are greater than their perceptions on reliability of TANESCO services. This is because most of respondents expect that an electricity company should be more reliable but their perceptions on reliability of TANESCO services are not positive. In this perspective, TANESCO should keep promises, should be sincere to solve problems facing customers, provide services on time and provide on time restoration.

Second, TANSECO should ensure assurance of services quality dimension attained by taking reasonable steps like ensuring that customers feel safe using TANESCO electricity and keeping a positive behavior of employees such as being courteous, being able to answer all the questions raised by customers and being able to instill confidence in customers.

Third, tangibility aspects of TANESCO service delivery should be emphasized including having modern looking equipment, well managed offices, neat clothes and PPEs for TANESCO electricians and proper preparation and reading of meters should be ensured. These will instill confidence not only the service provider's workers but also their residential customers

Fourthly, TANESCO should ensure empathy in terms of providing services such as giving clients individual consideration, setting working hours more advantageous to customers and better understanding the needs of customers including customized some of their services in relation to the unique customers' needs

Finally, TANESCO should be more responsive to customers' needs including provision of prompt services, willingness of service delivery employees to be more responsive to customer requests such as willingness to help, keeping clients educated as when the help will be performed and representatives ought to be prepared to rapidly react to clients' request.

#### **5.2.1** Areas for Further Studies

This study has opened a way for other studies in the future in order to add empirical knowledge concerning administration quality measurements and consumer loyalty issues in Tanzania Energy Industry and other public sectors which provide important service to the community. This study adopted SERVQUAL Model as its guidance; the model has five gaps but this study focused on the overall summative gap which was "expected service versus perceived service". Other interested researchers can adopt this model and work on other service gaps such as "External communication to consumers versus service transportation"; "service details versus administration transportation"; "shopper assumption versus the executives insight" and "the board discernments versus the particulars of service"

The study only focused TANESCO residential customers in Nyamagana district which is part of Mwanza city. Further research is required in other districts of Tanzania prior generalization. Similar study could also carried in rural Tanzania as dynamics in those areas are different from urban Tanzania.

#### REFERENCES

- [1] Ali M A and Yaseen E A (2016), Service quality in public services: A study of the public services in urban Egypt, *Journal of Services Marketing*, Vol 43, pp. 132-147
- [2] Angelova, B. and Zekiri, J. (2011). "Measuring Customer Satisfaction with Service Quality Using American Customer Satisfaction Model (ACSI Model)" In: *International Journal* of Academic Research in Business and Social Sciences, Vol. 1 (3), pp.232-258.
- [3] Chikwawawa, C (2019), Service Quality and Customer Satisfaction in the Public Sector: The Case of the National Social Security Authority in Zimbabwe, *International Journal of Scientific and Research Publications*, Vol.9 (4), pp. 282-295.
- [4] Cronin, J. J. Jr& Taylor, S. A. (1992). Measuring Service Quality: A Re-Examination and Extension. *Journal of Marketing*, Vol. 6 (3), pp. 55-68.
- [5] Dehghan A (2006), Relationship between service quality and customer satisfaction: in the case of CCG (Customer Centric Group) Co, Masters' Thesis, Lulea University of Technology.
- [6] Easwaran S and Singh S (2010), *Marketing Research Concepts, Practices and Cases*, Oxford University Press, Seventh Edition.
- [7] Gender. Journal of Business Economics and Management,
   Vol. 12(2), pp. 278-300.
   http://dx.doi.org/10.3846/16111699.2011.573308
- [8] Given, L. M. (2008). *The Sage encyclopedia of qualitative research methods*. Sage: Thousand Oaks.
- [9] Gliem A J and Gliem R R (2003), Calculating, Interpreting, And Reporting, Cronbach's Alpha Reliability Coefficient ForLikert-Type Scales Likert R (1932), A technique for measurement of attitude. Archives of Psychology, Vol 140, pp5-55.
- [10] Gobena A G (2019), The Impact of Service Quality on Customer Satisfaction: A Case Study on Nekemte Municipality, Oromia Region, Ethiopia, Annals of Social Sciences and Management Studies, Vol 4(1), pp.16-25
- [11] Gözükara, İ., &Çolakoğlu, N. (2016). A Research on Generation Y Students: Brand Innovation, Brand Trust and Brand Loyalty. *International Journal Of Business Management and Economic Research (IJBMER)*, Vol. 7(2), pp.603-611.
- [12] Griffin, J. (1995). Customer loyalty: How to earn it, how to keep it. New York: Lexington.
- [13] Hadiyati E (2014), Impact of Service Quality on Customer Satisfaction in Indonesian Public Sector Organizations, International Journal of Management Sciences and Business Research, Vol-3 (12), pp.92-99
- [14] Juwaheer, T.D. (2011). Gender Bias in Hotel Guests' Perceptions of Service Quality: *An Empirical Investigation of Hotels in Mauritius. E-Review of Tourism Research*, Vol. 9(5), pp. 164-189.

- [15] Kang, G. D. and James, J. (2004). Service Quality Dimension an Examination of Gronroos's Service Quality Model. *Managing Service Quality*, Vol. 14 (4), pp. 266-277.
- [16] Karatepe, O.M. (2011). Service Quality, Customer Satisfaction and Loyalty: The Moderating Role of Gender. Journal of Business Economics and Management, Vol. 12(2), pp. 278-300. http://dx.doi.org/10.3846/16111699.2011.573308
- [17] Khan, M M and Fasih, M (2014), Impact of service quality on customer satisfaction and customer loyalty: Evidence from banking sector, *Journal of Commerce and Social Sciences* (PJCSS), Vol. 8 (2), pp. 331-354
- [18] Khattab F (2019), Investigating the Service Quality Dimensions and their Impact on University Students' Satisfaction in a Private Higher Education Institution in Lebano, Doctoral Degree Thesis, Staffordshire University, UK.
- [19] Kotler, P., & Armstrong, G., (2013). *Principles of Marketing. Upper Saddle River*, Irwin Publications
- [20] Kotler. P., Armstrong., G., Wong, V., & Saunders J. (2008). *Principles of Marketing.* 5th Ed. Prentice Hall.
- [21] Krejcie, R V and Morgan, D W, (1970) Determining Sample Size for Research Activities, Educational and Psychological Measurement
- [22] Kwok S Y, Jusoh A, ZainabKhalifah Z (2016) The influence of Service Quality on Satisfaction: Does gender really matter?, *Omania Science*, Vol. 12 (2), pp.444-461
- [23] Lissitsa, S., &Kol, O. (2016). Generation X vs. Generation Y – A decade of online shopping. *Journal Of Retailing And Consumer Services*, Vol. 31, pp. 304-312.
- [24] Lovelock C and Wright L (1998), Principles of Service Marketing and Management, Printice-Hall. International (UK), Limited London
- [25] Maackey A and Gass S M (2005), Second Language Research Methodology and Design, Routledge, London, UK
- [26] Malhotra N K, Nunan D and Birks D F (2017), Marketing Research: An applied Approach, Fifth Edition, London, UK, Pearson Education Limited
- [27] Malhotra, N. K., Ulgado, F. M., Agarwal, J., Shainesh, G., & Wu, L. (2005). Dimensions of service quality in developed and developing economies: multi-country crosscultural comparisons. *International Marketing Review*, Vol. 22(3), pp. 256-278.
- [28] McGaugh, T. L. (2003). *Legal Writing: The Journal of the Legal Writing Institute*, 9,119-144.measuring consumer perceptions of service quality', *Journal of Retailing*,64(1), pp. 12-40.
- [29] Mokhlis, S. (2012). The Influence of Service Quality on Satisfaction: A Gender Comparison. *Public Administration Research*, Vol. 1(1), pp. 103-112. http://dx.doi.org/10.5539/par.v1n1p103
- [30] Namupala A N (2019), An Investigation Of The Impact Of Quality Of Service On Customer Satisfaction Of Nampower Residential Customers, Master's Thesis, University Of Namibia.
- [31] Neuman, W.L. (2006), Social Research Methods: Qualitative and Quantitative Approaches. 6th Edn., USA: Pearson.

- [32] O'Leary Z (2017), The Essential Guide to doing your research project, 3<sup>rd</sup> Edition, Sage Publications, Los Angeles
- [33] Owino E O (2015), The influence of service quality and corporate image on customer satisfaction among university students in Kenya, Doctoral Degree Thesis, University of Nairobi, Kenya
- [34] Parasuraman, A., Zeithlaml, V.and Berry, L(2002), Service Quality Deliverythrough website s: Acritical review of extant knowledge, Journal of the Academy of marketing Science, Vol. 30 (4) pp. 362-375.
- [35] Parasuraman, A. and Zeithaml, V. A.1982. 'Differential Perceptions of Suppliers and Clients of Industrial Services', In: Berry, L., Shostack, G. and Upah, G. eds. *Emerging Perspectives Services Marketing*. Chicago: American Marketing.
- [36] Parasuraman, A., Berry, L. L., and Zeithaml, V. A. (1991). Refinement and reassessment of the SERVQUAL scale. *Journal of Retailing*, *Vol.* 67(4), pp. 420-450.
- [37] Parasuraman, A., Zeithaml, V. A., and Berry, L. L. (1988). Servqual: A multiple-item scale for measuring consumer perception. *Journal of Retailing*, Vol. 64(1), pp.12-40.
- [38] Parasuraman, A., Zeithaml, V. and Berry, L.1985.'A conceptual model of service quality and its implication for future research', *Journal of Marketing*, 49(4):41-50.
- [39] Parasuraman, A., Zeithaml, V. and Berry, L.1988. SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality ', *Journal of Retailing*, 64(3), pp.54-67
- [40] Parasuraman, A., Zeithaml, V. and Berry, L.1991. 'Refinement and reassessment of the SERVQUAL scale: a multiple-item scale for measuring consumer permeations of service quality', *Journal of Retailing*, 67(2), pp. 45-62
- [41] Parasuraman, A., Zeithaml, V. and Berry, L. 1999. Delivering Quality Service. New York: Maxwell Macmillan International
- [42] Parasuraman, A., Zeithaml, V., & Berry, L. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. *Journal Of Marketing*, Vol. 49(4), pp.41-50. doi: 10.2307/1251430
- [43] Parment, A. (2012). Generation Y in Consumer and Labour Markets. New York: Routledge.
- [44] Parment, A. (2013). Generation Y vs. Baby Boomers: Shopping behavior, buyer involvement and implications for retailing. *Journal Of Retailing And Consumer Services*, Vol. 20(2), pp.189-199. doi: 10.1016/j.jretconser.2021.12.001
- [45] Payne, A.(1993). The Essence of Services Marketing. UK: Prentice Hall Ltd.
- [46] Polit D F, Bell T C and Hungler B P (2004), Research processes in nursing, methods evaluation and use, 5<sup>th</sup> edition, Porto Alegre Artmed
- [47] Rahulan, M., Troynikov, O., Watson, C., Janta, M., &Senner, V. (2015). Consumer behavior of generational cohorts for compression sportswear. *Journal of Fashion Marketing And Management*, Vol. 19(1), pp. 87-104. doi: 10.1108/jfmm-05-2021-0072

- [48] Rashid, M.H. (2008), Measuring and achieving quality customer service: a study on public sector in Malaysia. A Master's thesis submitted to the: School of Hospitality and Service Management, Rochester Institute of Technology, Rochester, New York
- [49] Rattray J C and Jones M C (2007), Esssential Elements of questionnaire design and development, Journal of Clinical Nursing, Vol.16, pp. 234-243
- [50] Riitho V K (2018), The influence of service quality on customer satisfaction: a study of container shipping lines in Kenya from a freight forwarder perspective, Masters' Thesis Strathmore University, Nairobi, Kenya
- [51] Robson C (2002). Real World Research: a resource for social Science and practitioners', researchers, 2<sup>nd</sup> edition, Oxford, Blackwell, London
- [52] Saunders, M., Lewis, P& Thornhill, A. (2012), Research methods for business students, 13thed. UK: Kogan Page Limited.
- [53] Sekaran, U. (2003). *Research Methods for Business: A skill building approach*. New York: John Wiley and Sons
- [54] Sekaran, U., & Bougie, R. (2010). Research Methods for Business: A Skill-Building Approach, 5thEd. London, UK: John Wiley and Sons.
- [55] Sultan, P. and Wong, H. (2010). Performance Based Service Quality Model: An Empirical Study of Japanese Universities. *Quality Assurance in Education*, Vol. 18(2), pp. 126-143.
- [56] TANESCO (2020). Customers Database in Nyamagana District: Annual Report on householder consumers
- [57] TANESCO (2020), Customers Service Report: Mwanza Regional Assessment
- [58] Tarimo L (2015), Assessment of the impact of service quality on customer satisfaction and loyalty in banking sector in Tanzania: case of Diamond Trust Bank Ltd Tanga, Masters Degree Thesis, Mzumbe University, Morogoro, Tanzania
- [59] Williams, K., & Page, R. (2011). Marketing to the Generations. *Journal Of Behavioral Studies In Business*, Vol. 3, pp.1-17. Retrieved from
- [60] Yamane, T.(1967). *Statistics, An Introductory Analysis*, 2nd Ed., New York: Harper and Row.
- [61] Zamil and Shammot (2011)Role of Measuring Customer Satisfaction in Improving the Performance in the Public Sector Organization, *Journal of Business Studies Quarterly*, Vol. 2 (3), pp.32-41.
- [62] Zeithaml, V A , and Bitner M J . (2005). *Service marketing: integrating customer focus across the Firm*, 4th edition Tata McGraw Hill Publishing Company Ltd.
- [63] Zeithaml, V A . (2003). Service marketing, integrating customer focus across the Firm 3<sup>rd</sup> Ed.Tata McGraw Hill Ltd
- [64] Zeithaml, V A, and Bitner M J. (2002). Service marketing: integrating customer focus
- [65] Zeithaml, V, Bitner M J, Gremler D. D (2006). Service Marketing, integrating customer Focus Across the firm, 4th edition. Tata McGraw Hill India.

Peter et al. / Effect of service quality on customer satisfaction in Tanzanian energy industry. A case of TANESCO residential customers in Nyamagana District

- [66] Zeithaml, V.A. (1988) Consumer Perceptions of Price, Quality and Value: A Means-end Model and Synthesis of Evidence, *Journal of Marketing*, Vol. 52 (July), pp. 2-22.
- [67] Zeithaml, V.A., Bitner, M.J., Gremler, D.D. (2018), Services Marketing: Integrating Customer Focus Across the Firm with Connect Access. (7th ed.). New York: NY. McGraw-Hill Education. Textbook: ISBN: 978-1260051988
- [68] Zemke, R., Raines, C., &Filipczak, B. (2000). Generations at Work: Managing the Clash of Veterans, Boomers, Xers, and Nexters in Your Workplace. New York: AMA Publication